

## WSB SERVICES

Municipal  
▲  
Transportation  
▲  
Water Resources  
▲  
Water / Wastewater  
▲  
Traffic  
▲  
Structural  
▲  
Environmental  
▲  
Construction Services  
▲  
Surveying  
▲  
Right-of-Way  
▲  
GIS

### Associate's Group Expands

Mike Rief, PE and Barritt Lovelace, PE have been jointly appointed to WSB's Associate Group. Mike and Barritt will play key roles in helping to advance WSB's reputation as a leader in the engineering field.

"We are pleased to have Barritt take on this new role for WSB. His understanding of the industry and his extensive structural experience will enable him to be an effective representative for WSB at all levels," said Sabri Ayaz, PE, Vice President, and Structural Group Manager. Lovelace is a Senior Structural Engineer involved in the Lyndale Avenue and Crosstown Bridge projects.

Rief is a Senior Project Manager who currently leads the TH 212 Design-Build Oversight project, which is now nearing completion. Prior to becoming a WSB staff member, Mike worked as the District Materials Engineer in Mn/DOT's Rochester office.

Bret Weiss, PE, President says, "Mike is a very driven individual with specialty expertise that will help WSB lead the industry through innovation and education. His understanding of both private and public processes will boost WSB's quality initiatives."



Barritt Lovelace, PE



Mike Rief, PE

### LEED's the Way in 2009

by Steve Gurney, PE

The Leadership in Energy and Environmental Design (LEED™) Green Building Rating System™ is a global effort promoting sustainable green building and development practices. From 1994 to 2006, LEED expanded from one standard for new construction to a comprehensive system of five interrelated standards covering all aspects of the development and construction process. It is a popular guide for green building and is continuously modified by workers in the green building industry, through the U.S. Green Building Council (USGBC).



LEED presents the tools needed to assess the measurable impact on their building's performance. The rating system addresses five major areas: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.

Engineers, construction managers, landscape architects, government officials, architects, real estate professionals, facility managers, interior designers, and lenders all use LEED to help them calculate sustainability for new and existing buildings. Now new LEED guidelines are being developed for neighborhood development. The USGBC hopes to launch the final rating system in 2009.

### What's Inside!

Storm Water Alternatives  
and Water Re-use  
Page 2

WSBU Offers Exciting  
New Program!  
Page 2

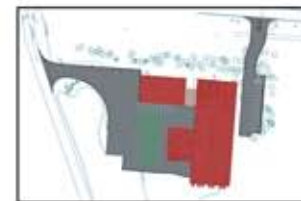
Sharing Insight  
Page 3

News Around the Office  
Page 3

Associate's Group Expands  
Page 4

The LEED for Neighborhood Development will be of particular interest for local governments because it blends many of the development-related components that we deal with on a regular basis. Some examples of credits available include credits for resource preservation, diversity of uses, access to surrounding areas, proximity to existing infrastructure, storm water management, and the use of recycling.

WSB has adopted a new program that allows our staff to seek LEED accreditation so that we may assist our clients in planning, engineering, and evaluating developments seeking LEED certification. If you would like more information on this program, please contact Steve Gurney at [sgurney@wsbeng.com](mailto:sgurney@wsbeng.com) or 763-287-7164.



City of Mahtomedi Public Works Facility

### WSB Plays a Role in Minnesota History

The I-35W Bridge project does not stop; crews are on site 24 hours a day, seven days a week. Shifts can range from 12-18 hours and will continue through the summer. Because of WSB's local expertise, familiarity with the design-build process, and knowledge of Mn/DOT's testing and inspection standards, WSB was asked to be a part of the reconstruction of the I-35W Bridge. Currently, 25 certified WSB staff members are on-site. The expertise WSB provides consists of senior bridge inspectors, a precast/prestressed concrete institute level III quality assurance inspector, underground utility inspectors, a material quality assurance tester, grading and base inspectors, and pavement inspectors.

Jeff Michniewicz, who is the Quality Assurance Manager for WSB, understands the personal impact the project has on team members. "One Saturday night during a 19-hour, all night concrete pour, I took a moment to step back under the 10th Street Bridge to view the work progressing. As I overlooked the project site from the south Mississippi River bank, I saw hundreds of people working together under the glow of dozens of light poles. The illumination that danced upon the 10th Street Bridge, coupled with the cool, crisp air, created an ambience that is hard to explain. At that moment, I took a mental picture that will be with me forever. I truly hope that each member of the reconstruction team is able to capture their memorable moment."



## Storm Water Alternatives and Water Re-use

by Andrea Moffatt, PWS

Many cities and counties are facing increasing storm water regulations as well as wanting creative solutions to address storm water management. "How do I meet requirements on my road reconstruction project? How do I address these "super storm" rain events we've been getting? Is there any way to re-use this water to reduce costs and provide benefit?" These are common questions that bear consideration.

WSB's Water Resource Group can help your community design and implement creative storm water management solutions. We have worked with cities to create rain gardens in neighborhoods as part of the street reconstruction projects. For small rainfall events, the storm water will infiltrate into the ground. In this manner, storm water runoff is reduced from the area and pollutants are taken up by the rain garden.

In concert with the rain gardens, we have also designed and implemented an underground, offline treatment system since the rain gardens alone could not provide sufficient treatment. Storm sewers servicing the neighborhood discharged directly to the Mississippi River, with little or no storm water treatment. A traditional pond was not a feasible option due to limited public right-of-way or available land that would be suitable for construction of a pond. Several options were evaluated in the feasibility study and a recommendation was made to construct a large, underground treatment system on the 72-inch diameter trunk storm sewer line that would treat a 493-acre drainage area.

WSB designed the 52-foot wide by 64-foot long underground system to retain 80 percent of the total suspended solids flowing through the trunk storm sewer for a one inch, 24 hour rainfall event. It was also designed to retain floatable pollutants entering the device. The structure was appropriately sized to make sure that resuspension of retained materials would not occur for rainfall events up to, and including, the ten year, 24 hour event. This resulted in the design of a bypass manhole that allows large rainfall events to bypass the system.

We have designed a storm water runoff and municipal water filter backwash re-use system. This project is a first of its kind, innovative demonstration project incorporating alternative uses for surface water runoff and filter media backwash water from the city water treatment plant to be used for irrigation on a city park and city hall site. The project will re-use water currently discharged to downstream waterbodies and therefore will eliminate the volume of runoff and the associated pollutants to a local lake and the Mississippi River. The project will result in elimination of 100% of the pollutants currently discharged to the Mississippi River for the one-year event and reduces reliance on potable water for irrigation and protects valuable groundwater supplies. The project will include the construction of a water re-use storage tank located under a proposed storm water pond.



Rain Garden

WSB's team can work with you to design and implement creative solutions to storm water issues.

## WSBU Offers Exciting New Program!

The WSB University is unveiling a new, invigorating program. In keeping with our vision to be the desired engineering company among premier clients by attracting, developing, and retaining top talent; we would like to introduce the new WSBU Project Management Certification Program. This program is a collection of existing and new courses aimed at sharpening project management skills. For those that are new to project management or would like their career path to include project management, this program will provide the essential prerequisite education tools for achieving professional goals.

The program aims to:

- Provide in-house classes on basic project management skills tailored to our industry
- Educate up and coming staff with career goals in project management as well as existing project managers
- Be the platform for managers and employees for advancement in a career of project management
- Certify staff as a form of recognition of employee dedication for completing the project management program and ensuring that WSB is committed to excellence in project management
- Continue to improve the program to stay competitive with other education programs as well as providing the best project managers in our industry

Contact Kevin Wold, Human Resources Manager, to enroll in this program. Your participation will help this program evolve and maintain a standard of excellence within our industry.



## Sharing Insight

### Transportation Research Conference

May 24-25, St. Paul RiverCentre

Session Title: Roundabouts: Turning Heads and Cars - Part I and II  
Speakers: Tony Heppelmann, PE and Chuck Rickart, PE/PTOE



Chuck will present information on the 70th Street roundabouts in the City of Edina. He will discuss the methodology, findings/results, and future applications for the three full-movement roundabouts between France Avenue and York Avenue.



Tony will discuss the crash statistics for roundabouts at two intersections on 66th Street in the City of Richfield. He will present the roundabout crash data from various sources and identify consistencies and inconsistencies in the available roundabout crash data.

### Minnesota Rural Water Association Conference

March 4, St. Cloud

Session Title: Where Should We Locate That Well?  
Speakers: Nancy Zeigler, PE and BJ Bonin, GIT



Nancy and BJ discussed the benefit of geologic analysis in siting wells and the advantage of test wells. They emphasized the benefit of actual well conditions dictating quantities.



Nancy and BJ highlighted the usefulness and cost effectiveness of the study rather than the technical aspects.

### 2008 Land Development East Conference & Expo

March 25-26, Atlanta

Session Title: Downtown Business Impact Mitigation: Replacing Infrastructure and Reestablishing Businesses  
Speaker: Ron Bray, PE



Ron spoke about the ten-year project development process to establish a new regional bridge crossing over the Mississippi River in central Minnesota and the impacts to downtown businesses and business district.

## News Around the Office

### 2008 ACEC/MN Engineering Excellence Honor Award

Minnesota Twins Stadium High Definition Laser Scan

### 2008 ACEC/MN Engineering Excellence Grand Award

Sauk Rapids Regional Bridge Project (teamed with SRF)



BJ Bonin, GIT and Nancy Zeigler, PE accept the MSPE Award

### 2008 MSPE Merit Award

North Branch Well Siting Study and Municipal Production Well No. 5

### WSB Basketball Players Tie for Second Place

WSB's basketball team participated in the 2008 Annual ACEC/MN Basketball Tournament. The group played well and won the first three of their four games ending up tied for second place in their division.



WSB Basketball Team

**WSB continued our effort to support Feed My Starving Children by packaging nearly 30,000 meals during the month of March!**

## Welcome to WSB...

WSB is excited to announce and welcome the following staff to our team.

Kirk Corson, AICP - Senior Appraiser - ROW Acquisition/Relocation Specialist  
Brian Bourassa, PE - Senior Project Manager/Business Services  
Jed Chesnut - Wetland/Natural Resource Specialist  
Kate Miner, PE - Senior Project Manager (St. Cloud Office)  
Reuben Collins - Transportation Planning Engineer  
Justin Hansen - GIS Specialist  
Chris Sapp - IT Intern



Kirk, Reuben, Jed and Brian